Paper #3

FORM PTO-1449U.S. DEPARTMENT OF COMMERCE	ATTY. DOCKET NO. S00-229/US	SERIAL NO. Not assigned
LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)	APPLICANT Michael E. Webber et al.	
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	1		R. K. Hanson et al.; "High-resolution spectroscopy of combustion gases using a tunable ir diode laser;" AUGUST 1977/VOL. 16, NO. 8/APPLIED OPTICS, PP 2045
	2		Alan C. Eckbreth; "Recent advances in laser diagnostics for temperature and species concentration in combustion;" EIGHTEENTH SYMPOSIUM (INTERNATIONAL) ON COMBUSTION, THE COMBUSTION INSTITUTE, 1981
	3		Ronald K. Hanson; "Combustion diagnostics: planar imaging techniques;" TWENTY-FIRST SUMPOSIUM (INTERNATIONAL) ON COMBUSTION/THE COMBUSTION INSTITUTE, 1986/PP. 1677-1691
	4		Danel T. Cassidy et al.; "Trace gas detection with short-external-cavity InGaAsP diode laser transmitter modules operating at 1.58 um;" APPLIED OPTICS/VOL. 27, NO. 13/1 JULY 1988
	5		Brian F. Ventrudo et al.; "Operating characteristics of a tunable diode laser absorption spectrometer using short-external-cavity and DFB laser diodes;" 20 NOVEMBER 1990/VOL. 29, NO.33/ APPLIED OPTICS
	6		Louis C. Philippe et al; "Laser-absorption mass flux sensor for high-speed airflows;" OPTICS LETTERS/VOL. 16, NO.24/DECEMBER 15, 1991
	7		M. P. Arroyo et al.; "Absorption measurements of water-vapor concentration, temperature, and line-shape parameters using a tunable InGaAsP diode laser;" APPLIED OPTICS/ VOL. 32, NO. 30/ 20 OCTOBER 1993, PP. 6104

	8		M. P. Arroyo et al.; "Diode-laser absorption technique for simultaneous measurements of multiple gas dynamic parameters in high-speed flows containing water vapor;" APPLIED OPTICS/ VOL. 33, NO. 15/ 20 MAY 1994, PP. 3296
	9		M. pilar Arroyo; "Dual diode-laser fiber-optic diagnostic for water-vapor measurements;" JULY 15, 1994/ VOL. 19, NO. 14/ OPTICS LETTERS, PP. 1091
	10		D. S. Beer et al.; "Multiplexed diode-laser sensor system for simultaneous H_2O, O_2, and temperature measurements;" OPTICS LETTERS/ VOL. 19, NO. 22/ NOVEMBER 15, 1994
	11		Wade C. Eckhoff; "A continuously tunable long-wavelenghth cw IR source for high-resolution spectroscopy and trace-gas detection;" APPL. PHYS. B 63, 437-441, 1996
	12		David M. Sonnenfroh et al.; "Diode laser sensors for combustor and aeroengine emissions testing: applications to CO, CO_2,OH, and NO;" 19TH AIAA ADVANCED MEASUREMENT AND GROUND TESTING TECHNOLOGY CONFERENCE, JUNE 17-20, 1996/ NEW ORLEANS, LA
	13		H. Q. Le, et al.; "Broad wavelength tenability of grating-coupled external cavity midinfrared semiconductor lasers;" APPL. PHYS. LETT. 69 (19), 4 NOVEMBER 1996, PP. 2804
	14		M. Gabrysch; " Simultaneous detection of CO and CO_2 using a semiconductor DGB diode laser at 1.578 um;" APPL. PHYS. B65, 75-79 (1997)
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	16		R. K. Hanson et al.; "Recent advances in laser-based combustion diagnostics;" 35TH AEROSPACE SCIENCES MEETING & EXHIBIT, JANUARY 6-10, 1997/ RENO, NV
	17		R. Villarreal et al.; "Temperature and CO_2 concentration profiles in flames measured by laser absorption tomography;" 35TH AEROSPACE SCIENCES MEETING AND EXHIBIT, JANUARY 6-9, 1997/RENO, NV
	18		David Christian Hovde et al; "Wavelength modulation detection of water vapor with a vertical cavity surface-emitting laser;" 20 FEB. 1997/ VOL. 36, NO. 6/APPLIED OPTICS
	19		Shang-I Chou et al.; "Diode laser absorption measurements of CH_3CI and CH_4 near 1.65um;" APPLIED OPTICS/ VOL. 36, NO. 15/20 MAY 1997
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	22		R. M. Mihalcea et al.; "Advanced diode laser absorption sensor for in situ combustion measurements of CO_2, H_2O, and gas temperature;" TWENTY-SEVENTH SYMPOSIUM (INTERNATIONAL) ON COMBUSTION/ THE COMBUSTION INSTITUTE, 1998/ PP. 95-101

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	N5		L. S. Rothman et al.; "Energy levels, intensities, and linewidths of atmospheric carbon dioxide bands;" J. Quant. Spectrosc. Radiat. Transfer, 48:537-566, 1992
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	N7		S. T. Sanders et al.; "Diode laser absorption sensor for measurements in pulse detonation engines;" Paper number 2000-0358, AIAA 38th Aerospace Sciences Conference, Reno, NV, January, 2000
	N8		D. S. Baer et al.; "Scanned- and fixed-wavelength absorption diagnostics for combustion measurements using multiplexed diode lasers;" AIAA Journal, 34 (3): 489-493, March 1996
	N9		Mark G. Allen et al.; "Diode laser absorption sensors for gas dynamic and combustion flows;" Measurement Science and Technology 9(4), 545-562(1998)
	N10		Michael E. Webber et al.;" In situ combustion measurements of CO, CO_2, H_2O and temperature using diode laser absorption sensors;" Proceedings of the Combustion Institute, Volume 28, 2000/pp. 407-413
	N11		Michael E. Webber et al.; "Measurements of NH_3 and CO_2 with distributed-feedback diode lasers near 2.0 um in bioreactor vent gases;" 20 August 2001/Vol. 40, No. 24/ Applied Optics
	N12		"Final report: Multiplexed diode-laser gas sensor system for in situ multi-species emissions measurements;" National Center for Environmental Research, Office of Research and Development, U.S. Environmental Protection Agency; Last updated: March 9, 2001

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